

3050



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

RB T101896-5
Job Sheet 180043



SHIP

7-13

NO
FAIL

Part No: RB T101896-5

Job Qty: 1 ea

Part Name: Base



Part Weight: 0 lbs

Status: Scheduled

Priority: High

Job Created: 6/28/18

Job Tracking No:

Due Date: 6/22/18

Created By: Logan David

Type: SOLD

Description:

Note: DWG RB T101896 Rev. A IPP Rev. A 18.05.23 new issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea	6/22/18	6/22/18	0.00	0.00	Start Up Machining-4		18-0704
100	Waterjet	1 pcs	6/22/18	6/22/18	0.00	0.10	Waterjet 2 OMAX		
120	Mill Conv	1 pcs	6/22/18	6/22/18	0.25	1.33	Mill Conv 2		
130	QC	1 pcs	6/22/18	6/22/18	0.00	0.00	QC2 Machining-5		18/7/5
140	QC	1 pcs	6/22/18	6/22/18	0.00	0.00	QC8 Machining-5		18/10/07
150	Outsource	1 pcs	6/22/18	6/22/18	0.00	0.00			
152	Packaging	1 pcs	6/22/18	6/22/18	0.00	0.00	Packaging2		DAS
155	QC	1 pcs	6/22/18	6/22/18	0.00	0.00	QC6		38
160	Packaging	1 pcs	6/22/18	6/22/18	0.00	0.00	Packaging3-2		9-89
165	QC21-SA	1 Ea	6/22/18	6/22/18	0.00	0.00	QC21		53

Part Op 100 - 1-Cut blank. ***.050" MATERIAL AS BEEN LEFT ON CONTOUR TO BE FINISH ON MANUAL MILL EXCEPT
 Descriptions: CENTER CUTOOUT WHICH IS CUT TO SIZE.*** 2-Deburr necessary
 120 - 1-Machine as per Dwg Dwg Rev: *** OPEN C'BORE TO 1.0635" TO COMPENSATE FOR ZINC PLATE BUILD-UP.*** 2-Deburr
 140 - Engrave T/N using Marktronic engraver as per DWG.
 150 - Issue P/O to Groupe Altech: P/O -Zinc plate (YELLOW OR BLACK) per ASTM B633 TYPE 2 Class 2
 -Certificate of Conformity is required

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
MT-4140-S-3.000X8.000	AISI 4140 / 4142 Steel Plate 3.000" T X 8.000" W	2.2500 ft (2.25 ea)	90-Start up Operation	5089141

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	MT-4140-S-3.000X8.000	2	24	0

Part Specifications

Specifications could not be found.

Plex 7/3/18 8:29 AM dart.logan.david



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkebury, ON K6A 1K7
CANADA
TEL: 1 613 632-6200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S089142



Part: RB T101896-5

Job No: 180043

Serial No/Batch: S089142

Revision: A

Inspector:

Exp Date:

Instructions:

Date: 07/04/18

DART AEROSPACE LTD		Work Order:	18340
Description: Base		Part Number:	RBT101896-5
Inspection Dwg: RBT101896	Rev: A		Page 1 of 1

INSPECTION SHEET

[illegible]

Measured by:	20 9-88	Checked by:	gmgm L.	QC Inspector:	
Date:	18-07-04	Date:	18/07/10	Date:	

Engineering Approval: (If necessary)		Date:	
--	--	--------------	--

Rev	Date	Change	Revised by	Approved
A	14.07.31	New Issue	KJ	

DQA: _____ Date: _____

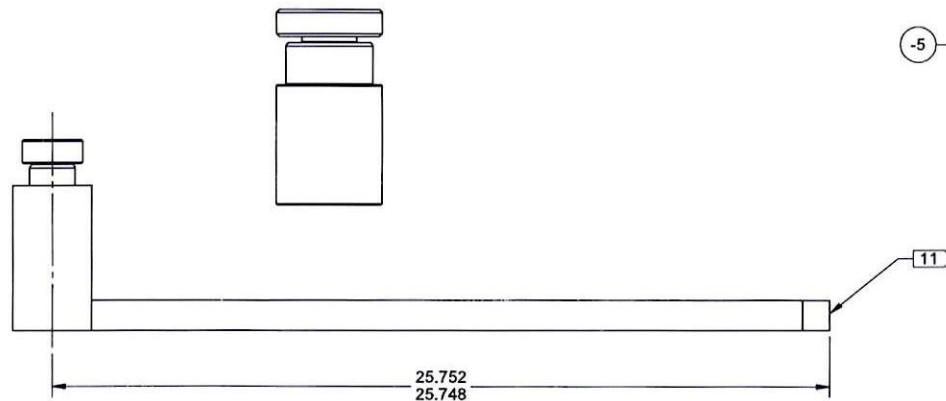
WORK ORDER NON-CONFORMANCE / UPDATE

CA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																													
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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																														
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Root Cause				FAULT CATEGORY																																																																	
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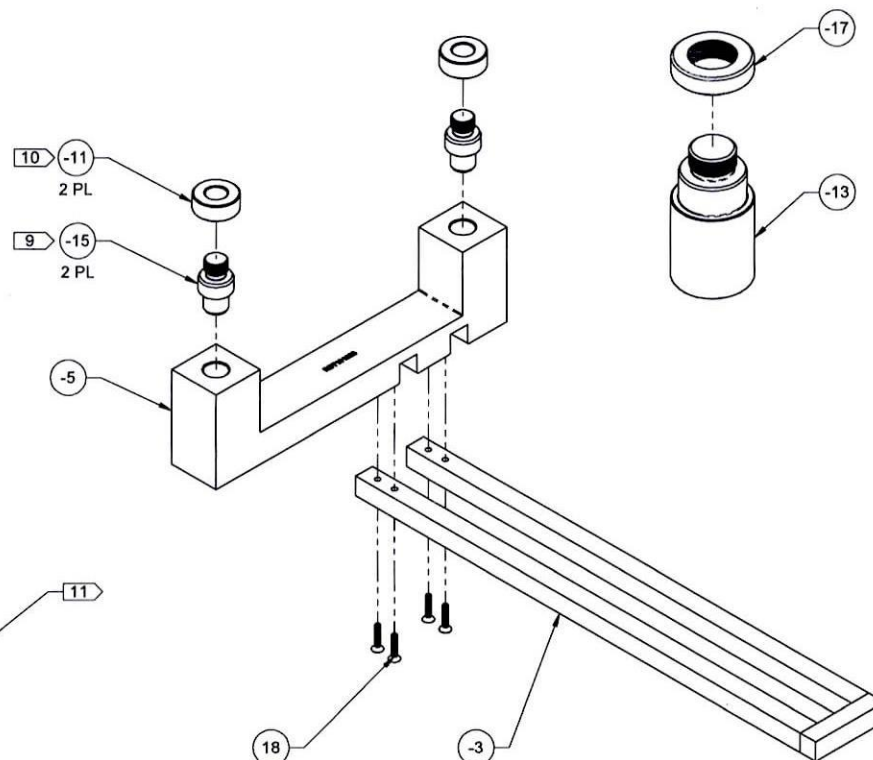
ITEM #	QTY.	PART #	PART TITLE
-3	1	RB T101896-3	BAR WELDED ASSY
-5	1	RB T101896-5	BASE
-11	2	RB T101896-11	SPINDLE NUT
-13	1	RB T101896-13	GRIP PIN
-15	2	RB T101896-15	SPINDLE PIN
-17	1	RB T101896-17	GRIP NUT
18	4	McMaster#91253A544 OR EQUIV.	COUNTERSUNK SCREW, 1/4-20 X 1-1/4 LG



RB T101896 M/R GRIP SPACING TOOL

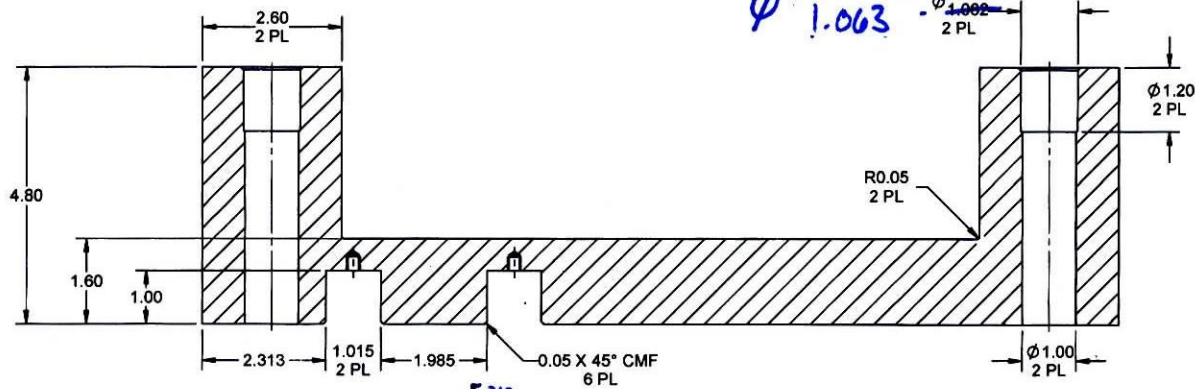
NOTES:

- 1) MATERIAL: N/A
- 2) HEAT TREAT: N/A
- 3) FINISH: N/A
- 4) TOLERANCES: X.X = $\pm 0.1"$ / $\pm 1"$
X.XX = $\pm 0.01"$ / $\pm 0.5"$
X.XXX = $\pm 0.005"$ / $\pm 0.1"$
X.XXXX = $\pm 0.0005"$ / $\pm 0.05"$
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = $\pm 0.005"$
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) BREAK SHARP EDGES: N/A
- 7) IDENTIFICATION: N/A
- 8) APPLY LOCTITE 262 / 263 ON THE THREADS OF ITEM 18 THEN ASSEMBLE AS SHOWN AND TORQUE TO 40-50 IN-LBS
- 9) APPLY CLEAR MULTIPURPOSE LOCTITE ON MATING SURFACES THEN PRESS FIT ITEM -15 WITH ITEM -5 AND REMOVES EXCESS LOCTITE
- 10) INSTALL HAND TIGHT
- 11) REMOVE MATERIAL FROM THIS FACE IF NECESSARY TO ACHIEVE REQUIRED DIMENSION, SURFACE FINISH OF 32 RA MICROINCH (N6) OR BETTER IS REQUIRED

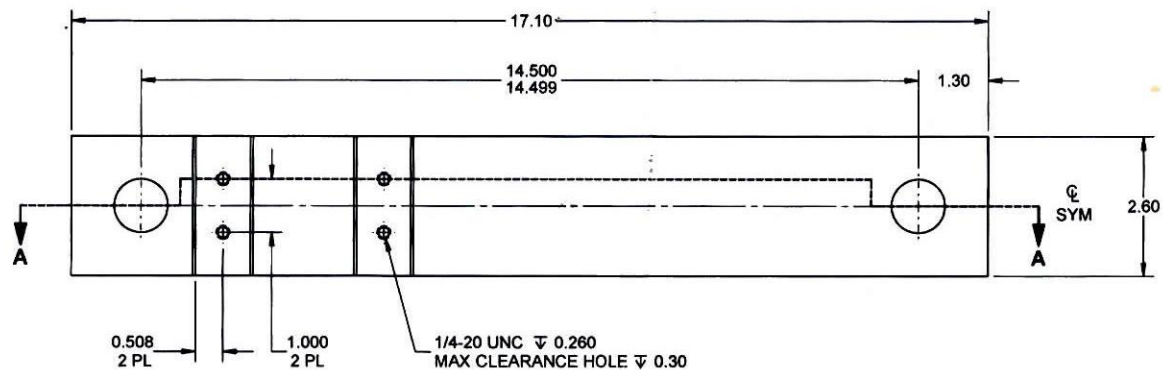


A	NEW ISSUE	18-727	KT
REV.	DESCRIPTION	ECN #	BY
DESIGN	KT	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	KPT		
CHECKED	ML	TOOL PART #	REV. A
MFG. APPR.	DP	RB T101896	SHEET 1 OF 9
APPROVED	<i>M. Lee</i>	TITLE	SCALE
		M/R GRIP SPACING TOOL	NTS
DATE	5/28/2018	COPYRIGHT © 2018 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

RELEASED



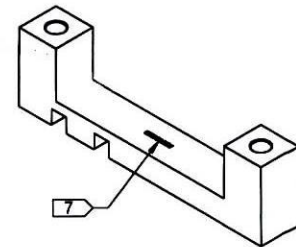
SECTION A-A



RB T101896-5 BASE

NOTES:

- 1) MATERIAL: 4140/4142 (28-32 RC)
- 2) HEAT TREAT: N/A
- 3) FINISH: ZINC PLATE (YELLOW OR BLACK) PER ASTM B633 TYPE 2 CLASS 2
- 4) TOLERANCES: X.X = ± 0.1 " / ± 1 "
X.XX = ± 0.01 " / ± 0.5 "
X.XXX = ± 0.005 " / ± 0.1 "
X.XXXX = ± 0.0005 " / ± 0.05 "
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = ± 0.005 "
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) BREAK SHARP EDGES: 0.005" TO 0.010"
- 7) IDENTIFICATION: MACHINE ENGRAVE PER CAD MODEL AS SHOWN OR DOT MARK T/N AS SHOWN



SHOP COPY
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ENGINEERING
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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 178340

20180622

72
180043

RELEASED

DESIGN	KT	DART AEROSPACE LTD	
DRAWN	KPT	HAWKESBURY, ONTARIO, CANADA	
CHECKED	ML	TOOL PART #	REV. A
MFG. APPR.	DP	RB T101896	SHEET 3 OF 9
APPROVED	<i>M. Lee</i>	TITLE	SCALE
DATE	5/28/2018	M/R GRIP SPACING TOOL	NTS
COPYRIGHT © 2018 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD			

$$Y' = 0.798"$$

$$Y^2 = 1.798$$



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO040449

Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

PO No: PO040449
PO Date: 7/10/18
Due Date: 7/13/18
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Phone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pymt Terms: Net 30
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	178327	RB T101896-15	Spindle Pin -Issue P/O to GROUPE ALTECH: P/O -Zinc plate, ASTM B633 TYPE 2 SC2 -Color yellow -Material type; 4140 -Certificate of Conformity is required	Firmed	-	7/13/18	12 pcs	0 pcs	12 pcs	\$0.01/pcs	\$0.12
									12x	18.07.12	ms

Line Item Note ** rush - need back by Friday :(**

Items											
Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
2	178322	RB T101896	Main Rotor Grip Spacing Tool -Issue P/O to GROUPE ALTECH: P/O -Zinc plate, ASTM B633 TYPE 2 SC2 -Color yellow -Material type; 4140 -Certificate of Conformity is required ***NOTE***-3 AND -5 TO BE SENT TOGETHER***	Firmed	-	7/13/18	1 pcs	0 pcs	1 pcs	\$0.01/pcs	\$0.01
Line Item Note ** rush - need back by Friday :(**											
3	180043	RB T101896-5	Base -Issue P/O to Groupe Altech: P/O -Zinc plate (YELLOW OR BLACK) per ASTM B633 TYPE 2 Class 2 -Certificate of Conformity is required	Firmed	-	7/13/18	1 pcs	0 pcs	1 pcs	\$0.01/pcs	\$0.01
Line Item Note ** rush - need back by Friday :(**											
4	174444	RBW6305G01232-3G-3	Stud -Issue P/O to Groupe Altech: P/O -Cadmium plating, QQ-P-416F TYPE II, CLASS II -Color; Yellow -Certificate of Conformity is required	Firmed	-	7/13/18	13 pcs	0 pcs	13 pcs	\$0.01/pcs	\$0.13
Line Item Note ** rush - need back by Friday :(**											
Grand Total:										\$0.27	

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 7/10/18 1:30 PM dart.tsimiklis.chrisoula



Certificat de Conformité / Certificate of Compliance

(010942-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

010942- 1

Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
12-Jul-2018		Aman		PO040449				
#Ligne Line#	No. de Série / # Pièce Part Number /Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	RBT101896-15 Rev.	RBT101896-15 01 -ZINC-YELLOW [ZINC YELLOW] OLD YELLOW CHROMATE, 96 hours TYPE 2 SC2 MATERIAL 4140	ZINC CH	12	12	0	0	0
2	RBT101896-15 Rev.	RBT101896-15 01 -ZINC-YELLOW [ZINC YELLOW] OLD YELLOW CHROMATE, 96 hours TYPE 2 SC2 MATERIAL 4140	ZINC CH	1	1	0	0	0
3	RBT101896-5 Rev.	RBT101896-5 01 -ZINC-YELLOW [ZINC YELLOW] OLD YELLOW CHROMATE, 96 hours type 2 class 2	ZINC CH	1	1	0	0	0

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.